The results are expressed by the value DT(T1, 1), which means that, starting from a lower temperature T1, the tilt angle changes by less than 1° in the whole range from T1 to (T1+DT). For example, DT(15,1)=22 means that the tilt angle changes by a maximum of 1° in the range from 15°C to 37°C.

The DT values should generally be as high as possible to provide a broad operating temperature range without significant deviation of the director. DT values are always reported in degrees Celsius.

In the following inventive and comparative examples, the above-described alignment is carried out by applying the 3 volt direct voltage in the temperature range of ± 2°C at the N/Sc* phase transition point.

The mixture of Example 1 has the following values: DT(15,1) / DT (20,1) / DT (25,1) / DT (30,1): 25 / 21 / 18 / 16 and thus a broad operating temperature range, as likewise illustrated by the examples below.

Example 2

A mixture consisting of 19.28% of compound 1, 19.28% of compound 2, 15.36% of compound 3, 23.12% of compound 4 and 3.04% of compound 5 from Example 1 and 20% of the compound
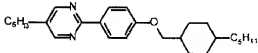
has the phase transition values I / N* 97.7-92.8 and N* / Sc* 58.9°C and the values DT(15,1) / DT (20,1) / DT (25,1) / DT (30,1): 30 / 27 / 25 /21.

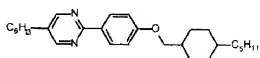**Example 3**

A mixture of the composition given below has the phase transition values I / N* 78.9 - 74.4 and N* / Sc* 57.3°C and the values DT(10,1) / DT (15,1) / DT (30,1): 22.5 / 20 / 17.5.

Compound	Content	Structure
1	19.2%	C_9H_{19}—[pyrimidine]—[phenyl]—OC_6H_{13}
2	19.2%	C_8H_{17}—[pyrimidine]—[phenyl]—OC_6H_{13}
3	15.4%	$C_{10}H_{21}$—[pyrimidine]—[phenyl]—O—C(=O)—C_7H_{15}
4	23.1%	$C_{11}H_{23}$—[pyrimidine]—[phenyl]—O—C(=O)—[cyclohexyl]—C_5H_{11}
5	10.0%	C_9H_{19}—[pyrimidine]—[difluorophenyl F,F]—OC_7H_{15}
6	10.0%	C_9H_{19}—[pyrimidine]—[difluorophenyl F,F]—OC_8H_{17}
7	3.0%	[cyclohexyl]—[phenyl]—[pyridine F]—O—CH$_2$—CH(CH$_3$)—C_6H_{13} (S)

Example 4

A mixture consisting of 16.23% of compound 1, 16.32% of compound 2, 18.1% of compound 3, 19.6% of compound 4, 8.5% of compound 5, 8.5% of compound 6, 2.55% of compound 7 from Example 3 and 15% of the compound

C_6H_{13}—[pyrimidine]—[phenyl]—O—CH$_2$—[cyclohexyl]—C_5H_{11}

as the phase transition values I / N* 92.2-87.8 and N* / Sc* 57.7°C and the values: DT(10,1) / DT (15,1) / DT (30,1): 27.5/23.8/18.

5   **Example 5**

A mixture consisting of